

**I CLAIM AS MY INVENTION:**

1. A method for digital subtraction angiography comprising the steps of:  
  
providing a 3D volume dataset, obtained from a computed tomography scan of a body region containing structures without enrichment of the structures with a contrast agent;  
  
from said 3D volume dataset, calculating a first 2D x-ray image of said body region without enrichment of said structures with contrast agent;  
  
generating a second 2D image of said body region with contrast agent enrichment of said structures; and  
  
subtracting said first 2D x-ray image from said second 2D x-ray image.
2. A method as claimed in claim one comprising generating said 3D dataset by conducting said computed tomography scan of said body region with a C-arm CT apparatus.
3. A method as claimed in claim one comprising bringing said second 2D x-ray image into registration with said 3D volume set by digital image processing.